

Amendments to the claims (this listing replaces all prior versions):

1. (previously presented) A machine-based method comprising
receiving historical multi-dimensional data representing multiple variables
transforming variables into more predictive variables, including Bayesian renormalized
variables, linearly transformed and non-linearly transformed variables and imputed missing
values for categorical or continuous variables,
pruning variables for which the data is sparse or missing,
adjusting a population of variables to represent main effects exhibited by the data and
significant interaction and non-linear effects exhibited by the data, and
using the population of variables to generate a predictive model for interacting with a
commercial system.
2. (original) The method of claim 1 in which adjusting the population of variables to
represent interaction effects includes
stages of main effect interactions, main effects with main effect interactions and excluded
variable interactions, and main effects with main effect interactions and excluded variable
interactions together with excluded variable combined interactions.
3. (original) The method of claim 1 in which the predictive model predicts behavior of a
current customer with respect to retention of a current service or product of a vendor.
4. (original) The method of claim 1 in which the predictive model predicts behavior of a
current customer with respect to risk of asserting claims, loan payment or prepayment to a
vendor.
5. (original) The method of claim 1 in which the predictive model predicts behavior of a
current customer with respect to usage of a current service or product of a vendor.

6. (previously presented) The method of claim 1 also including enabling a user to reconstruct a sequence of choices involved in the creation of the predictive model.
7. (previously presented) A machine-based method comprising
in connection with a project based on historical data about a system being modeled,
generating a predictive model, and
providing to a user through a graphical user interface a sequence of dimension reduction
having at least two or more steps.
8. (previously presented) The method of claim 7 in which the system being modeled
comprises behavior of prospective or current customers of a vendor with respect to products or
services offered by the vendor.
9. (original) The method of claim 7 in which the predictive model predicts behavior of a
prospective or current customer with respect to purchase of a product or service of a vendor.
10. (original) The method of claim 7 in which the predictive model predicts behavior of a
current customer with respect to retention of a current service or product of a vendor.
11. (original) The method of claim 7 in which the predictive model predicts behavior of a
current customer with respect to risk of asserting claims, loan payment or prepayment to a
vendor.
12. (original) The method of claim 7 in which the predictive model predicts behavior of a
current customer with respect to usage of a current service or product of a vendor.
13. (original) The method of claim 7 in which the user interface controls staging of the
sequence of model generation activities.